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DOCKET NO.: D0617.70012US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sato et al.
Serial No.: 10/661,156
Confirmation No.: 6772
Filed: September 11, 2003
For: KDR AND VEGF/KDR BINDING PEPTIDES AND THEIR USE IN
DIAGNOSIS AND THERAPY
Examiner: Anand U. Desai
Art Unit: 1653

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 25th day of July, 2006.


Emily E. Zinkauskas

MAIL STOP AMENDMENT

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith are the following documents:

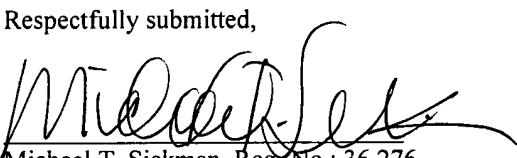
- Information Disclosure Statement
- PTO Form 1449 with cited references
- Copy of European Search Report (EP 03711418.8) dated April 21, 2006
- Copy of European Search Report (EP 03770325.3) dated April 21, 2006
- Copy of International Search Report and Written Opinion (PCT/US2005/032740) dated June 13, 2006
- Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check is not enclosed. If a fee is required, the Commissioner is hereby authorized to charge Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

By:


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Telephone: (617) 646-8000

Docket No.: D0617.70012US00

Date: July 25, 2006

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PART II: Information Cited

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The Applicant would like to bring to the Examiner's attention the enclosed search report or other communication from a corresponding or other International or Foreign National Application.

| <u>Serial No.</u> | <u>Mailing Date</u> | <u>Type(s) of Communication</u> | <u>Docket No.</u> |
|-------------------|---------------------|--|-------------------|
| EP 03711418.8 | April 21, 2006 | Partial European Search Report | D0617.70011EP00 |
| EP 03770325.3 | April 21, 2006 | Partial European Search Report | D0617.70012EP00 |
| PCT/US2005/032740 | June 13, 2006 | International Search Report and Written Opinion | D0617.70014WO00 |

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

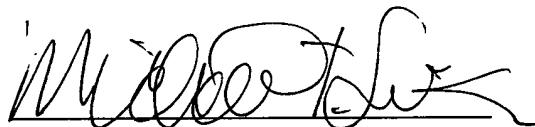
By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

By:

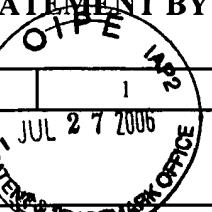


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| FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT <div style="text-align: center; margin-top: 10px;">  Sheet 1 of 4 </div> | | | APPLICATION NO.: 10/661,156 | ATTY. DOCKET NO.: D0617.70012US00 | |
| | | | FILING DATE: September 11, 2003 | CONFIRMATION NO.: 6772 | |
| | | | APPLICANT: Sato et al. | | |
| | | | GROUP ART UNIT: 1653 | EXAMINER: Anand U. Desai | |

JUL 27 2006

U.S. PATENT DOCUMENTS

| Examiner's Initials # | Cite No. | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication or Issue of Cited Document MM-DD-YYYY |
|-----------------------|----------|----------------------|-----------|---|---|
| | | Number | Kind Code | | |
| | A45 | 5,547,656 | | Unger | 08-20-1996 |
| | A46 | 6,033,645 | | Unger et al. | 03-07-2000 |
| | A47 | 6,130,071 | | Alitalo et al. | 10-10-2000 |
| | A48 | 6,231,834 | B1 | Unger et al. | 05-15-2001 |
| | A49 | 6,245,318 | B1 | Klibanov et al. | 06-12-2001 |
| | A50 | 6,528,039 | B2 | Unger | 03-04-2003 |
| | A51 | 6,537,520 | B1 | Rajopadhye et al. | 03-25-2003 |
| | A52 | 6,548,048 | B1 | Cuthbertson et al. | 05-14-2003 |
| | A53 | 6,548,663 | B1 | Cheesman et al. | 04-15-2003 |
| | A54 | 6,610,269 | B1 | Klaveness et al. | 08-26-2003 |
| | A55 | 6,680,047 | B2 | Klaveness et al. | 01-20-2004 |
| | A56 | 6,730,658 | B1 | Alitalo et al. | 05-04-2004 |
| | A57 | 6,773,696 | B2 | Unger | 08-10-2004 |
| | A58 | 6,777,534 | B1 | Klagsbrun et al. | 08-17-2004 |
| | A59 | 6,818,220 | | Alitalo et al. | 11-16-2004 |
| | A60 | 6,841,367 | B2 | Kendall et al. | 01-11-2005 |
| | A61 | 6,841,382 | B2 | Kendall et al. | 01-11-2005 |
| | A62 | 6,875,741 | B2 | Pillutla et al. | 04-05-2005 |
| | A63 | 7,034,105 | B2 | Alitalo et al. | 04-25-2006 |
| | A64 | 2002-0010137 | A1 | Ashkenazi et al. | 01-24-2002 |
| | A65 | 2002-0037289 | A1 | Thorpe et al. | 03-28-2002 |
| | A66 | 2002-0102215 | A1 | Klaveness et al. | 08-01-2002 |
| | A67 | 2002-0164667 | A1 | Alitalo et al. | 11-07-2002 |
| | A68 | 2003-0027246 | A1 | Pedyczak et al. | 02-06-2003 |
| | A69 | 2003-0124120 | A1 | Harris | 07-03-2003 |
| | A70 | 2003-0149262 | A1 | Cheesman et al. | 08-07-2003 |
| | A71 | 2003-0157025 | A1 | Unger et al. | 08-21-2003 |
| | A72 | 2003-0166873 | A1 | Lee et al. | 09-04-2003 |
| | A73 | 2003-0180718 | A1 | Pillutla et al. | 09-25-2003 |
| | A74 | 2003-0236190 | A1 | Pillutla et al. | 12-25-2003 |
| | A75 | 2004-0009122 | A1 | Klaveness et al. | 01-15-2004 |
| | A76 | 2004-0023887 | A1 | Pillutla et al. | 02-05-2004 |

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| EXAMINER: | DATE CONSIDERED: |
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[#] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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| | | | | GROUP ART UNIT: 1653 | EXAMINER: Anand U. Desai |
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|--|-----|--------------|----|---------------------|------------|
| | A77 | 2004-0141922 | A1 | Klaveness et al. | 07-22-2004 |
| | A78 | 2004-0147448 | A1 | Alitalo et al. | 07-29-2004 |
| | A79 | 2004-0147449 | A1 | Siemeister et al. | 07-29-2004 |
| | A80 | 2004-0147726 | A1 | Alitalo et al. | 07-29-2004 |
| | A81 | 2004-0213790 | A1 | Lee et al. | 10-28-2004 |
| | A82 | 2004-0223911 | A1 | Bednarski et al. | 11-11-2004 |
| | A83 | 2004-0224398 | A1 | Anand-Apte | 11-11-2004 |
| | A84 | 2004-0248781 | A1 | Kerbel | 12-09-2004 |
| | A85 | 2004-0266694 | A1 | Tchistiakova et al. | 12-30-2004 |
| | A86 | 2005-0002865 | A1 | Klaveness et al. | 01-06-2005 |
| | A87 | 2005-0037967 | A1 | Rosenblum | 02-17-2005 |
| | A88 | 2005-0181995 | A1 | Kawai et al. | 08-18-2005 |
| | A89 | 2006-0003926 | A1 | Rajopadhye et al. | 01-05-2006 |
| | A90 | 2006-0008930 | A1 | Toyoda et al. | 01-12-2006 |
| | A91 | 2006-0078501 | A1 | Goertz et al. | 04-13-2006 |
| | | | | | |
| | | | | | |

FOREIGN PATENT DOCUMENTS

| Examiner's Initials # | Cite No. | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Translation (Y/N) |
|-----------------------|----------|-------------------------|-----------|-----------|---|--|-------------------|
| | | Office/ Country | Number | Kind Code | | | |
| | B37 | EP | 0 580 726 | B1 | Unger | 02-02-1994 | |
| | B38 | EP | 0 627 940 | B1 | University of Texas | 12-14-1994 | |
| | B39 | EP | 0 711 127 | B1 | Unger | 06-15-1996 | |
| | B40 | EP | 0 804 932 | A2 | ImaRx Pharmaceutical Corp. | 11-05-1997 | |
| | B41 | EP | 1 064 376 | | Genentech, Inc. | 01-03-2001 | |
| | B42 | EP | 1 081 913 | A2 | Phillips Corporate Intellectual Property GmbH | 03-07-2001 | |
| | B43 | EP | 1 306 095 | A2 | University of Texas | 05-02-2003 | |
| | B44 | EP | 1 432 433 | | Novo Nordisk A/S | 06-30-2004 | |
| | B45 | EP | 1 519 193 | A2 | Ludwig Institute for Cancer Research | 03-30-2005 | |
| | B46 | EP | 1 574 518 | A2 | Nec Soft, Ltd. | 09-14-2005 | |
| | B47 | EP | 1 586 333 | A2 | Schering Aktiengesellschaft | 10-19-2005 | |
| | B48 | WO | 97/05250 | A2 | Helsinki University Licensing Ltd | 02-13-1997 | |
| | B49 | WO | 97/09427 | A1 | Genentech, Inc. | 03-13-1997 | |

| | |
|-----------|------------------|
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| | | | | APPLICANT: Sato et al. | | | |
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| | | | | | | | |
|--|-----|----|-------------|----|---|------------|--|
| | B50 | WO | 98/18495 | A2 | Nycomed Imaging AS | 05-07-1998 | |
| | B51 | WO | 98/18500 | A2 | Nycomed Imaging AS | 05-07-1998 | |
| | B52 | WO | 98/33917 | A1 | The Ludwig Institute for Cancer Research | 08-06-1998 | |
| | B53 | WO | 98/58053 | A1 | Kendall | 12-23-1998 | |
| | B54 | WO | 99/55383 | A2 | Nycomed Imaging AS | 11-04-1999 | |
| | B55 | WO | 00/63380 | A1 | Genentech, Inc. | 10-26-2000 | |
| | B56 | WO | 01/52875 | A1 | Ludwig Institute for Cancer Research | 07-26-2001 | |
| | B57 | WO | 01/57067 | A1 | Supratek Pharma Inc. | 08-09-2001 | |
| | B58 | WO | 02/16412 | A2 | Dyax Corp. | 02-28-2002 | |
| | B59 | WO | 02/72011 | A2 | Targesome, Inc. | 09-19-2002 | |
| | B60 | WO | 02/96367 | A2 | Targesome, Inc. | 12-05-2002 | |
| | B61 | WO | 03/035839 | A2 | DGI Biotechnologies, Inc. | 05-01-2003 | |
| | B62 | WO | 03/070747 | A2 | Novo Nordisk A/S | 08-28-2003 | |
| | B63 | WO | 03/084574 | A1 | Bracco International BV | 10-16-2003 | |
| | B64 | WO | 03/103581 | A2 | Genentech, Inc. | 12-18-2003 | |
| | B65 | WO | 2004/001064 | A2 | Dyax Corporation | 12-31-2003 | |
| | B66 | WO | 2004/058802 | A1 | Amersham Health AS | 07-15-2004 | |
| | B67 | WO | 2004/058803 | A2 | Amersham Health AS | 07-15-2004 | |
| | B68 | WO | 2004/064595 | A2 | Bracco International BV | 08-05-2004 | |
| | B69 | WO | 2004/065621 | A1 | Dyax Corp. | 08-05-2004 | |
| | B70 | WO | 2004/085617 | A2 | The Cleveland Clinic Foundation | 10-07-2004 | |
| | B71 | WO | 2004/108074 | A2 | Research Development Foundation | 12-16-2004 | |
| | B72 | WO | 2005/011722 | A2 | Ludwig Institute for Cancer Research | 02-10-2005 | |
| | B73 | WO | 2005/016963 | A2 | Ludwig Institute for Cancer Research | 02-24-2005 | |
| | B74 | WO | 2005/070472 | A2 | Sunnybrook and Women's College Health Sciences Centre | 08-04-2005 | |
| | B75 | WO | 2005/072417 | A2 | The Ohio State University Research Foundation | 08-11-2005 | |
| | B76 | WO | 2006/015385 | A2 | Sopherion Therapeutics, Inc. | 02-09-2006 | |

OTHER ART — NON PATENT LITERATURE DOCUMENTS

| Examiner's Initials # | Cite No | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Translation (Y/N) |
|-----------------------|---------|---|-------------------|
| | C18 | BINETRUY-TOURNAIRE et al., Identification of a peptide blocking vascular endothelial growth factor (VEGF)-mediated angiogenesis. EMBO J. 2000 Apr 3;19(7):1525-33. | |
| | C19 | HARVATH et al., Laminin peptides stimulate human neutrophil motility. J Immunol. 1994 Jun 1;152(11):5447-56. | |

| | |
|-----------|------------------|
| EXAMINER: | DATE CONSIDERED: |
|-----------|------------------|

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| | | | | GROUP ART UNIT: 1653 | EXAMINER: Anand U. Desai |
| Sheet | 4 | of | 4 | | |

| | | | |
|--|-----|---|--|
| | C20 | IWAMOTO et al., YIGSR, a synthetic laminin pentapeptide, inhibits experimental metastasis formation. Science. 1987 Nov 20;238(4830):1132-4. | |
| | C21 | JIA et al., Peptides encoded by exon 6 of VEGF inhibit endothelial cell biological responses and angiogenesis induced by VEGF. Biochem Biophys Res Commun. 2001 Apr 27;283(1):164-73. | |
| | C22 | LECOUTER et al., Identification of an angiogenic mitogen selective for endocrine gland endothelium. Nature. 2001 Aug 30;412(6850):877-84. | |
| | C23 | SATO et al., Development of mammalian serum albumin affinity purification media by peptide phage display. Biotechnol Prog. 2002 Mar-Apr;18(2):182-92. | |
| | C24 | SHRIVASTAVA et al., A distinct strategy to generate high-affinity peptide binders to receptor tyrosine kinases. Protein Eng Des Sel. 2005 Sep;18(9):417-24. | |
| | | | |

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. __, filed __, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

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